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Marketing Information
Series

Country Market Survey

Pollution Control Instrumentation and Equipment

Italy

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Italy

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Italy's pressing need to institute environmental cleanup measures is expected to generate strong demand for pollution control instruments and equipment. Projections indicate a 1987 market of nearly $384 million[1], representing 7 percent annual growth over the 1981 level of $261 million (see table 1). Italy's central government has been unable to apply effective antipollution measures so far, but European Economic Community (EEC) directives aimed at unifying control efforts across Europe should mean tighter regulations in the future. Moreover, the tragedy that killed dozens of people several years ago when an industrial incinerator discharged dioxin at Seveso has prompted growing public support for curtailing all forms of pollution.

For U.S. firms, which captured over 10 percent of imports with sales of $9.1 million in 1981, the expanding market is expected to mean sales of nearly $14 million by 1987 (see table 2). American vendors are strongest in supplying sectors where U.S.-owned multinational parent companies play a major role. The activities of European and local subsidiaries, as well as licensing arrangements, accentuate the importance of American pollution control equipment manufacturers in the Italian market.

Italy's complicated system of regional government hampers enforcement and even enactment of uniform national pollution control legislation. For example the Merli Law, which attempts to coordinate national water pollution control standards, has been stoutly resisted by industrialists, who insist that implementation will cost

[1] All values are shown in U.S. dollars. Local currency data are converted at the following exchange rates: US$1 = 856.5 lira (1980), and 1,137 lira (1981 and subsequent years). Values for years through 1981 are expressed in current rather than constant dollars/prices; values for 1982 and subsequent years are expressed in 1981 constant dollars/prices.

Table 1.—Italy: The market[1] for pollution control instrumentation and equipment, 1980, 1981, and projected 1987

(in thousands of U.S. dollars)

	1980	1981	1987
I strumentation			
Production	42,750	46,700	59,100
Imports	22,250	23,900	30,900
Exports	10,400	10,550	14,300
Market size	54,600	60,050	75,700
Equipment			
Production	195,100	194,100	266,400
Imports	64,500	63,200	85,000
Exports	62,700	56,300	43,400
Market size	196,900	201,000	308,000
Total			
Production	237,850	240,800	325,500
Imports	86,750	87,100	115,900
Exports	73,100	66,850	57,700
Market size	251,500	261,050	383,700

[1] Size of market equals production (ex factory value) plus imports (c.i.f.) minus exports (f.o.b.).

Source: Monthly Statistical Bulletin and International Trade Administration, Office of Information Product Development and Distribution research report, "The Market for Pollution Control Equipment—Italy" (see Additional Information box).

Table 2.—Italy: Imports of pollution control instrumentation and equipment by country of origin, 1980, 1981, and projected 1987

(in thousands of U.S. dollars)

	1980	1981	1987
Wastewater treatment			
Instrumentation			
United States	330	370	600
Germany	450	510	
Netherlands	150	170	
France	130	150	
Others	440	500	
Total	1,500	1,700	2,500
Equipment			
United States	3,520	3,630	6,100
Germany	8,360	7,670	
France	3,960	3,830	
United Kingdom	1,980	1,810	
Others	4,180	3,260	
Total	22,000	20,200	28,000
Air pollution			
Instrumentation			
United States	470	425	750
United Kingdom	550	525	
Germany	550	500	
Netherlands	320	350	
Others	860	700	
Total	2,750	2,500	3,900
Equipment			
United States	1,180	820	1,150
Germany	5,580	4,390	
United Kingdom	3,200	2,700	
Others	4,540	3,590	
Total	14,500	11,500	14,500
Noise pollution			
Instrumentation			
United States	700	650	700
United Kingdom	1,500	1,450	
Germany	1,450	1,400	
France	550	500	
Others	2,800	2,500	
Total	7,000	6,500	7,000
Equipment			
United States	250	300	450
Germany	750	800	
France	510	500	
United Kingdom	450	450	
Others	1,040	1,450	
Total	3,000	3,500	4,500
Solid and semisolid wastes			
Hazardous wastes			
Instrumentation			
United States	750	950	1,200
Germany	1,950	3,000	
United Kingdom	1,550	1,600	
Sweden	1,350	1,400	
Others	1,400	2,050	
Subtotal	7,000	9,000	12,000
Equipment			
United States	300	500	1,000
Germany	1,500	2,500	
Sweden	700	1,200	
United Kingdom	400	500	
Others	100	300	
Subtotal	3,000	5,000	10,000

Nonhazardous wastes			
Instrumentation			
United States	300	330	450
Germany	1,500	1,650	
France	950	1,000	
Sweden	750	500	
Others	500	720	
Subtotal	4,000	4,200	5,500
Equipment			
United States	1,100	1,150	1,500
Germany	6,400	6,500	
France	4,400	4,600	
Sweden	3,500	3,800	
Others	6,600	6,950	
Subtotal	22,000	23,000	30,000
All solid and semisolid wastes			
Instrumentation			
United States	1,050	1,280	1,650
Germany	3,450	4,650	
Sweden	2,100	1,900	
Others	4,400	5,370	
Total	11,000	13,200	17,500
Equipment			
United States	1,400	1,650	2,500
Germany	7,900	9,000	
Sweden	4,200	5,000	
Others	11,500	12,350	
Total	25,000	28,000	40,000
Total imports	86,750	87,100	115,900
Total from the U.S.	8,900	9,125	13,900
U.S. percent share	10.3	10.5	12

Source: Monthly Statistical Bulletin, Trade Associations

the hard-pressed Italian economy jobs. Particularly in the more affluent cities of Northern Italy, however, public pressure to clean up the environment is growing. Toxic wastes have become an emotional issue in the wake of the Seveso incident, and EEC-wide controversy over the effects of acid rain is expected to spur tighter control over air pollution emissions.

Italy's purchases of pollution control instrumentation amounted to $60 million in 1981 and are projected to expand at a modest 4 percent per annum pace to $75 million by 1987. Relatively slow growth in the market for hazardous wastes instrumentation is likely to offset rapid increases anticipated in purchases of instrumentation for controlling nonhazardous wastes and air and water pollution. Domestic manufacturers are able to supply many of the instruments required by local buyers, relying on licenses for access to the more advanced technology. Imports, which amounted to nearly $24 million, or 40 percent of the market in 1981, often represent OEM purchases and are subsequently reexported. Foreign-built devices make their strongest showing in the markets for air, noise, and nonhazardous waste instrumentation.

Equipment made up about 80 percent of the total pollution control instrumentation and equipment market in 1981. From $201 million in 1981, sales are projected to expand more than 7 percent annually, reaching $308 million in 1987. The dynamic market for wastewater treatment equipment accounts for the largest share of the total, though sales of equipment for handling hazardous wastes are also expected to soar. Italy's domestic industry is technologically able to provide virtually any kind of pollution equipment and is forecast to supply about 75 percent of the country's needs by 1987.

Competitive Assessment by Functional Category

Italy boasts an impressive pollution control engineering industry capable of meeting most of the needs of local buyers while competing successfully on world markets. Output of equipment and instrumentation amounted to $241 million in 1981 and is forecast to climb to $325 million in 1987, representing 5 percent annual growth. Imports, valued at $87 million in 1981, are expected to approach $116 million in 1987, with U.S. firms providing about 11 percent of the 1981 total and about 12 percent of the projected total. American strengths include instrumentation for water and air pollution. U.S.-based manufacturers face stiff competition from European vendors, especially German and French firms (a 33 percent and 14 percent market share in 1981), who enjoy the benefits of lower transport cost and duty-free access to this EEC market.

Wastewater treatment.—Sales of equipment and instrumentation for wastewater treatment totaled $96 million in 1981 (see table 3). Even most major cities still lack sewerage systems, though plans are being drawn up to install sewerage distribution and treatment networks in all regions. As long-delayed national water standards are implemented over the 1981-87 period, trade sources predict swift 8.5 percent average annual growth in expenditures, to some $156 million in the latter year.

In the market for instrumentation, projections call for sales growth of some 7 percent per annum, from $7.8 million in 1981 to $11.5 million in 1987. Since water quality standards and enforcement have been incorporated into the Merli Law, instrumentation will be needed to monitor discharges and control treatment. Italy's hilly terrain is expected to require use of remote sensing and monitoring instruments, as well as telemetric control. Prominent suppliers include local subsidiaries of such leading U.S. manufacturers as Fischer & Porter, Foster Wheeler, and Honeywell, and of European-based companies such as Electrofact (Sweden), Philips (Netherlands), and Siemens (Germany). Italian firms supply over three-fourths of the market but, unable to keep enough instruments in stock, often build to specifications. Several Japanese firms are now manufacturing instruments under contract to local suppliers, who sell them under their own brand names.

The market for wastewater equipment, valued at $88.5 million, is forecast to climb to $145 million by

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1987. Industry expectations that the Government will implement the Merli Law on schedule in 1986 underlie the projected 9 percent average annual increase. Not only will the Law's standards necessitate installation of new treatment facilities, but industrial plants, especially in the North, are also increasingly concerned with maintaining a public image of environmental consciousness. Many of the new treatment systems are likely to be built in conjunction with regional authorities to serve both industrial and residential needs.

Italy's domestic industry has adequate manufacturing and process expertise to handle most of the country's equipment requirements. Only a fifth of the market is expected to be supplied by imports in 1987. Imports consist primarily of such specialized items as ozone generators, reverse osmosis units, and activated carbon reactivators. As the complexity of wastewater treatment has grown, many local firms have turned to licensing arrangements to obtain technical know-how. Trade sources estimate that about 35 companies, most of them with access to overseas designs, win some 85 percent of equipment contracts. U.S. firms licensing technology to these companies include Permutit-Paramus, Osmonic-Mantra, Ionics, and Keene. Direct shipments from American plants amounted to $3.6 million, or 18 percent of imports, in 1981, but the U.S. share is expected to climb a sharp 9 percent annually, to $6.1 million (22 percent of imports), by 1987.

Air pollution.—A growing awareness of the need to reduce gaseous emissions is expected to spur substantial increases in the market for air pollution instrumentation and equipment, from $50 million in 1981 to just over $75 million in 1987. During the past decade, most heavy industries have installed particulate removal devices of varying efficiencies. The conventional wisdom in Italy is that as much as possible has been done to control particulate air pollution; the focus must now shift to minimizing gaseous emissions. Continuing investment will be required to meet locally set standards for gases, as well as to replace aging particulate equipment. High on the list of priorities is the need to reduce emissions of sulfur oxides and NO_x derivatives from both municipal and industrial stacks.

Sales of instrumentation amounted to a modest $5.2 million in 1981, and a $7.2 million market is projected for 1987. With domestic manufacturers unable to meet all the country's needs, imports totaling $2.5 million supplied half the 1981 market. Purchases from overseas sources are forecast to expand to $3.9 million, or some 55 percent of the market, by 1987. U.S. firms are expected to provide instruments worth $750,000 in the latter year. Remote monitoring and sensing devices are said to offer the best sales opportunities.

Table 3.—Italy: Sales[1] of instrumentation and equipment by functional area, 1980, 1981, and projected 1987

(in thousands of U.S. dollars)

	1980	1981	1987
Wastewater treatment			
Instrumentation	7,600	7,800	11,500
Equipment	87,400	88,500	145,000
Total	95,000	96,300	156,500
Air pollution			
Instrumentation	5,500	5,150	7,200
Equipment	49,500	45,000	68,000
Total	55,000	50,150	75,200
Noise pollution			
Instrumentation	9,000	9,200	10,000
Equipment	6,000	6,500	9,000
Total	15,000	15,700	19,000
Solid and semisolid wastes			
Hazardous wastes			
Instrumentation	23,500	28,000	32,000
Equipment	9,000	11,000	21,000
Subtotal	32,500	39,000	53,000
Nonhazardous wastes			
Instrumentation	9,000	9,900	15,000
Equipment	45,000	50,000	65,000
Subtotal	54,000	59,900	80,000
All solid and semisolid wastes			
Instrumentation	32,500	37,900	47,000
Equipment	54,000	61,000	86,000
Total	86,500	98,900	133,000
Total	251,500	261,050	383,700

[1] Sales are equivalent to market size, which is domestic production (ex. factory value) plus imports (c.i.f.) minus exports (f.o.b.).

Source: Monthly Statistical Bulletin and International Trade Administration, Office of Information Product Development and Distribution research report, "The Market for Pollution Control Equipment—Italy" (see Additional Information box).

The market for air pollution equipment, projected to rise from $45 million to $68 million over the 1981-87 period, reflects the growing interest in controlling gaseous emissions. Equipment expenditures in 1981 were about evenly split between equipment for particulates and gases; by 1987, trade sources predict a $39 million market for gaseous control equipment, versus only $29 million for particulates control devices. Imports, which amounted to $11.5 million in 1981, are heavily weighted towards gaseous emission control, with about 70 percent of foreign-bought equipment dedicated to this use.

Direct shipments of equipment from the United States amounted to only $820,000, or about 7 percent of the total. American firms wield their influence far more effectively through licensing; domestic companies with U.S. licenses play an active role in the market. Aeromecanica Stranich has the right to build dust collectors designed by Ducon, and ventilation equipment from ILG; Fonderie e Officione di Saronno builds air heaters under license to Dravo; TFI builds refrigeration equipment designed by Carrier; and CTPI uses a design sold by Research Cottrell to make filters.

Table 4.—Italy: Expenditures for pollution control instrumentation and equipment by major user sectors, 1981 and 1987

(in thousands of U.S. dollars)

	1981					1987				
	Total	Waste-water	Air	Noise	Solid, semisolid waste	Total	Waste-water	Air	Noise	Solid, semisolid waste
Government										
National (central)	10,485	4,500	1,010	75	4,900	17,350	7,800	1,500	100	7,950
Regional/rural										
Central North	66,160	21,200	15,100	210	29,650	125,650	55,000	22,500	250	47,900
Other regions	24,895	15,400	2,510	35	6,950	53,140	40,000	3,800	40	9,300
Public utilities	25,570	7,500	8,520	2,350	7,200	34,300	10,500	13,000	2,800	8,000
Industrial sector										
Petroleum and petrochemical	16,160	6,700	5,100	1,410	2,950	27,500	9,000	7,500	1,700	9,300
Heavy chemicals	18,850	5,550	2,510	1,890	8,900	26,500	6,000	3,700	2,200	14,600
Light chemicals	11,020	5,050	1,050	720	4,200	12,600	5,000	1,500	800	5,300
Heavy engineering	14,710	3,350	4,010	3,400	3,950	18,850	3,500	6,000	4,000	5,350
Light engineering	8,850	2,250	2,100	1,550	2,950	11,800	3,000	3,000	1,800	4,000
Cement and quarrying	13,720	1,650	3,510	710	7,850	16,000	2,500	2,500	800	7,500
Transport	5,210	1,120	1,000	2,100	990	6,300	1,000	1,500	2,500	1,300
Agriculture and food processing	10,130	5,000	1,910	350	2,870	14,300	7,000	3,000	400	3,900
Other	35,290	17,030	1,820	900	15,540	19,410	6,200	3,000	1,610	8,600
Total	261,050	96,300	50,150	15,700	98,900	383,700	156,500	75,200	19,000	133,000

Source: Environmental Control Consultancy Services, Trade Associations, and Italian Monthly Statistical Bulletin.

Noise pollution.—Trade sources point out that no effective noise pollution control legislation exists in Italy; as a result, the market for noise pollution instruments and equipment was worth only $15.7 million in 1981, with modest 3.5 percent annual expansion to $19 million anticipated over the 1981-87 period. Foreign vendors accounted for $10 million in sales, with U.S. firms providing nearly 10 percent. German and British firms are the leading third-country suppliers.

Purchases of instrumentation made up 60 percent of the market in 1981, but sluggish 1.4 percent growth is predicted through 1987. Sales of equipment, on the other hand, are expected to show more energetic expansion of almost 6 percent per annum. Trade unions provide an impetus to investment in protective measures for workers exposed to industrial noise, and most major firms follow sound health and safety practices in their plants. As a result, spending is centered on protective equipment and sound insulating material. Industrial users, including public utilities, accounted for all but 2 percent of combined instrument and equipment expenditures in 1981.

Solid and semisolid wastes.—Italian purchases of equipment and instruments for handling both hazardous and nonhazardous wastes amounted to some $98.9 million in 1981. A need to monitor and dispose of hazardous substances, as well as a growing sophistication in the handling of nonhazardous solid wastes, should help boost sales to a projected $133 million by 1987. In 1981, imports totaled $41.2 million, or over 40 percent of the market. Largest volumes of foreign-sourced shipments come from Germany, France, and Sweden. U.S. firms provided equipment and instruments worth almost $3 million.

Instrumentation dominated the $39 million market for hazardous waste handling apparatus in 1981, accounting for over 70 percent of the total. The disastrous Seveso episode prompted industry and Government alike to step up their monitoring efforts, thus boosting the market for instrumentation. Monitoring and sampling equipment continues to offer good sales opportunities for U.S. vendors. In addition, trade sources report that equipment for handling hazardous waste is in growing demand. After jumping some 20 percent to $11 million in 1981, equipment purchases are forecast to advance a swift 11 percent annually, to $21 million in 1987. Several EEC directives on the treatment and disposal of toxic wastes are in the initial stages of implementation in Italy. Industry is producing an inventory of toxic substances, Government authorities have begun setting up designated solid waste disposal sites, and several northern regions are in the process of establishing waste management authorities.

From about $60 million in 1981, sales of instrumentation and equipment for handling nonhazardous solid wastes are projected to rise about 5 percent per annum, reaching $80 million in 1987. Less than 20 percent of spending is allocated to instrumentation, which generated sales of only $330,000 for U.S. firms in 1981. Municipal garbage generated by Italy's urban areas is the primary source of nonhazardous solid wastes, which have traditionally been incinerated. More recently, however, municipalities and other Government agencies are shifting to landfill methods, either with or without compaction or pulverisation. Also under investigation are resource recovery techniques such as separation at the source, separate collections, mechanical separation, and

classification. Industry observers are doubtful that the techniques will prove cost-effective enough to be adopted.

Italian manufacturers maximize their own ability to meet the country's needs through licensing arrangements, often using licenses from different companies to build up a complete solid waste management system. Imports, which amounted to 46 percent of the equipment market in 1981, include garbage trucks from Sweden (Volvo) and Germany (Mercedes). U.S. firms provided equipment worth $1.15 million in 1981 and are forecast to expand their sales to $2.5 million by 1987.

Major Purchasers

The public sector is responsible for buying a major share of the pollution control instruments and equipment sold in Italy, since the economy is characterized by a degree of State involvement unmatched in the EEC. Electricity production and distribution is fully nationalized, and three state holding companies (IRI, ENI, and EFIM) with a total of some 730,000 employees, control portions of the country's steel, chemicals, textiles, petroleum, shipbuilding, electronics, telecommunications, aviation, and banking industries. As a result, total expenditures for pollution control equipment accounted for by the Government is greater than the $100 million indicated for central and regional government plus the $25.6 million spent by public utilities in 1981 (see table 4).

Even so narrowly defined, spending by the public sector is expected to grow rapidly over the 1981-87 period. Regional government in particular is forecast to nearly double its expenditures, while a more modest 9 percent annual growth is predicted for equipment spending by the central government.

Italy's 20 regional governments have a broad range of responsibilities, which include town and country planning, waste disposal, antipollution measures, water supply, and public works. Individual regional and local governments have been responsible for the few environmental protection achievements in the past, and they will remain crucial to the success of cleanup efforts in the future. The central government can enact laws that embody uniform air or water standards, but actual implementation of the laws rests within the purview of the regional authorities. Regional committees help formulate recommendations that are then applied by all jurisdictions. The Regional Committee for Atmospheric Pollution, for example, is evaluating new standards for fume emissions and types of products to be incinerated.

In the private sector, major buyers include the petroleum, petrochemical, and chemical industries; both light and heavy engineering; cement and quarrying; and agriculture and food processing. Processors of heavy and light chemicals invested almost $30 million in pollution control hardware in 1981; by 1987, they are projected to spend some $39 million. Petroleum refineries and petrochemicals plants spent $16.2 million in 1981, and are forecast to boost their expenditures to $27.5 million by 1987. For both the chemical and petroleum industries, 1987 spending on solid and semisolid waste instrumentation and equipment is expected to rank first among the four functional areas — wastewater treatment, air pollution, noise pollution, and solid and semisolid hazardous and nonhazardous wastes.

The two sectors — one public and one private — expected to account for the largest shares of 1987 pollution control equipment expenditures are profiled below. Regional governments are profiled because they play the pivotal role in determining investment in pollution control in Italy, in addition to spending heavily in their own right. In the private sector, petroleum and petrochemical processors are expected to boost their expenditures fast enough between 1981 and 1987 to surpass the heavy chemicals industry as the largest buyers of pollution controls.

Regional government.—Italy's regional governments, including municipalities, boast considerable autonomy and play the largest public role in the implementation of environmental policy. In addition to accounting for amost half (47 percent) of projected 1987 pollution control expenditures, the regions enforce the regulations to which private industry must conform.

Regional governments in the economically developed northern areas, home to many of Italy's leading industries, account for the largest share of pollution control expenditures. Four northern states (Lombardy, Emilia-Romagna, Trentino-Alto-Adige, and Piedmont) together contribute 58 percent of the country's gross industrial production. As a result, they have both the resources and the need to tackle environmental pollution. The central north regional governments accounted for $66 million of the $90 million devoted to pollution control instruments and equipment by regional authorities in 1981, and are forecast to spend $126 million of the $179 million total in 1987.

Wastewater treatment expenditures are projected to account for some $95 million, or 53 percent of total spending by regional governments, reflecting the greater emphasis being placed on water cleanup by EEC directives. Projected expenditures are also boosted by plans for a number of joint industry-municipal wastewater facilities. In addition, sewerage distribution networks are under development in all regions, and have been completed in several northern municipalities.

Leading prime contractors for wastewater treatment facilities purchased by regional governments include Acqua, Eurodepuratori, Waterplan, Breda Progetti e Costruzioni, Degremont Italia, and Off. Angelo Panelli. Among other prominent engineering firms

catering to the sector are Passavant Impianti, Termomeccanica Italiana, and Water Pollution Engineering.

Petroleum and petrochemical sector.—The high level of investment found elsewhere in Italian industry in recent years (20 percent of gross domestic product in 1980 and 1981) has not spread to the petroleum refining and petrochemical industry, which is suffering from overcapacity and weak demand. A reorganization of the entire chemical industry currently underway tends to involve takeovers by ENI and Occidental of existing plants previously operated by the now defunct SIR and Liquichemica. The goal is generally to rationalize and streamline production rather than to increase capacity, so new investment is minimal.

Purchases of pollution control equipment, on the other hand, are expected to pick up sharply. ENI has a major role in the petrochemical and petroleum refining industry; as a State-run holding company, it must be sensitive to environmental concerns. In consequence, the industry's spending on pollution control equipment is expected to show strong 9 percent average annual growth over the 1981-87 period, from $16.2 million in 1981 to $27.5 million in 1987.

Heaviest expenditures are likely for wastewater treatment and solid waste handling. Purchases of the latter are expected to show particularly swift growth, more than tripling from $3 million to $9.3 million between 1981 and 1987. Trade sources predict that the predominant solid waste disposal system in 1987 will combine incineration with energy recovery and encapsulation of solids residues for ultimate disposal. Incineration systems fell out of favor after the Seveso incident, which revealed the dangers of careless burning of toxic waste, but economics are now dictating greater use of such systems, albeit with tighter safeguards. Improved wastewater treatment will be needed to comply with new restrictions being placed on chemical oxygen demand (COD) discharges. Given the persistence of petrochemical industry pollutants, wastewater will almost certainly require activated carbon treatment prior to discharge — either into municipal systems or bodies of water.

Market Access Data

Some of the larger U.S. suppliers of pollution control equipment operate local sales offices. Not only does this keep them in touch with the market, but it also helps offset the effects of a "buy Italian" policy implemented by municipal authorities in response to the recessionary economic climate. Technical advisers and consultants often help Government agencies buy equipment, and a prominent local presence tends to maintain a U.S. firm's visibility when purchase decisions are made. For American companies with smaller Italian sales, trade sources recommend a competent agent or distributor. Exclusive distributorships are the rule, preferably country-wide, but by clearly defined regional territory when necessary. Observers suggest that firms entering the market appoint an agent already operating in the targeted industry with the desire and ability to expand his product range. The agent's ability to provide efficient after-sales support is considered essential.

Trade and Technical Regulations

Tariff rates on U.S.-built pollution control equipment range from 4 percent to 12 percent ad valorem. EEC-origin goods enter duty free, while products from European Free Trade Association member countries (Switzerland, Norway, Austria, Portugal) are entitled to an 80 percent tariff reduction. All products, domestic and foreign alike, carry an 18 percent value added tax. Foreign exchange controls are applied to certain restricted goods, which are also subject to import and export licensing.

Engineering standards to be used on specific projects are usually determined by regional authorities. ISO (International Standards Organization) and DIN (Deutsche Industrie Normung) standards are often quoted, though some companies adhere to ASA (American Standards Association) norms. For large projects, engineers or contractors may develop their own standards.

Additional Information

The project officer responsible for Country Market Surveys on Pollution Control Equipment is:

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The Survey summarizes a 101-page International Market Research (IMR) report prepared by Environmental Control Consultancy Services in Romsey, England under contract for the U.S. Department of Commerce and reflects the opinions and views of interviewees in Italy and not those of the Department of Commerce. The IMR report gives considerably more detail on all the points touched upon in the Survey, as well as marketing practices, trade regulations, technical standards, and the names and addresses of prospective customers, potential agents and distributors, trade associations, and trade publications.

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